

SAT E : Data Analysis School on X-ray Scattering from Liquid Interfaces

Time: 2 Full-days

Date: Thursday, April 23 – Friday, April 24

Course location: Building 446, APCF Conference Room

Organizers: Wei Bu (U Chicago) and Natalie Chen (U Chicago)

Description: Synchrotron x-ray scattering is the most powerful probe of near-atomic-level structure at liquid-vapor and liquid-liquid interfaces. Over the past 20 years, x-ray scattering from liquid interfaces has led to many key discoveries in physical, chemical, biological, and technological systems. However, the complex data analysis combined with the lack of a standard software package has prevented its expansion into more general scientific communities. This workshop focuses on using the ChemMatCARS data analysis package to analyze synchrotron x-ray scattering data from liquid surfaces and interfaces.

This school is intended primarily for graduate students, postdoctoral researchers, and young scientists with some expertise in liquid interface science. Participants are required to bring their own laptops to install and use the data analysis software developed by ChemMatCARS. We will provide a combination of interactive lectures, student activities, and beamline/instrument tours. Discussion of the theory underlying the data analysis and demonstrations of experimental methodology will be included.